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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,454	03/17/2004	Hajime Nishimura	16869P-108300US	5440

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EXAMINER	
BIBBINS, LATANYA	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/803,454	NISHIMURA ET AL.	
	Examiner	Art Unit	
	LaTanya Bibbins	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 February 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 23, 2007 has been entered.

In the remarks filed on July 23, 2007, Applicant amended claims 1, 3, and 6-10 and submitted arguments for allowability of pending claims 1-10.

Response to Arguments

2. Applicant's arguments filed July 23, 2007, with respect to the 35 U.S.C. 102(e) rejections of claims 1, 3, 6, and 8-10 over Shumura et al. (US Patent Number 6,738,330 B2), the 35 U.S.C. 103(a) rejection of claims 2, 5, and 7 over Shumura et al. (US Patent Number 6,738,330 B2) in view of Kondo (US Patent Number 5,561,644), and the 35 U.S.C. 103(a) rejection of claim 4 over Shumura et al. (US Patent Number 6,738,330 B2) in view of Sugita et al. (US Patent Number 5,311,494) have been fully considered but they are not persuasive.

In regard to claims 1-10, Applicant argues that none of the cited references, alone or in combination teach all of the features of amended independent claim 1. Specifically, Applicant argues that in contrast to amended claim 1, which recites

"continuously executing a recording operation on the optical disc," Shumura teaches a temperature sensor whose value is used to determine if recording of an optical disc should or should not be conducted.

However, as disclosed in the Shumura reference, the controller periodically monitors the output of the temperature detector "during a period that the apparatus is performing the recording operation" thereby constituting "continuously executing a recording operation on the disc" as recited in amended claim 1 (see column 7 lines 5-10).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 6, and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Shumura et al. (US Patent Number 6,738,330 B2).

Regarding claim 1, Shumura discloses an optical disc device (Figure 1) comprising: a pickup having a semiconductor laser for providing a laser beam for recording of data on an optical disc (column 4 line 28 and Figure 1 element 16); a motor coupled to rotate the optical disc (the spindle motor in column 6 line 59); a movement

mechanism configured to move the pickup in a radial direction of the optical disc (the servo mechanism in column 6 line 60); a system controller (Figure 1 element 10) configured to control the pickup by supplying drive current to the semiconductor laser (column 6 lines 61 and 62) and to control rotational speed of the optical disc (column 6 line 56); and a temperature sensor (Figure 1 element 14) configured to detect temperature of an interior of the pickup (column 4 lines 17-22 and column 6 lines 49-52); wherein the system controller determines data recording properties of the optical disc (see the discussion of how the controller determines data recording properties or "writing conditions" such as recording time and address etc., in column 9 lines 15-18), controls the drive current supplied to the semiconductor laser based on the temperature detected by the temperature sensor (column 6 lines 55-62) and controls the rotational speed of the motor based on the temperature detected by the temperature sensor and the data recording properties of the optical disc determined by the controller (the controller stops the recording, the recording speed equals zero, when the detected temperature exceeds a temperature range column 7 lines 20, 21 and 25 and 26), thereby continuously executing a recording operation on the optical disc (see column 7 lines 5-10 where the controller periodically monitors the output of the temperature detector "during a period that the apparatus is performing the recording operation").

Regarding claim 3, Shumura discloses the optical disc device wherein the system controller comprises a table for setting a data recording speed for the optical disc, the table containing the detected temperature and the data recording properties of

the disc as parameters (see the description of the ROM table in column 4 lines 6-8 and column 7 lines 6-10).

Regarding claim 6, Shumura discloses a method of recording data on an optical disc, the method comprising: rotating an optical disc (the spindle motor in column 6 line 59); recording data by directing a laser beam onto the optical disc (column 6 lines 61-64); detecting temperature of an interior region of a pickup having a semiconductor laser providing a laser beam for recording of data on the optical disc (column 4 lines 17-22 and column 6 lines 49-52); controlling drive current to the semiconductor laser based on the detected temperature (column 6 lines 55-62); determining data recording properties of the optical disc (see the discussion of how the controller determines data recording properties or "writing conditions" such as recording time and address etc., in column 9 lines 15-18); setting the rotational speed of the optical disc based on the detected temperature and the determined data recording properties of the optical disc (the controller stops the recording when the detected temperature exceeds a temperature range column 7 lines 20,21 and 25 and 26); and continuously executing a recording operation on the optical disc (see column 7 lines 5-10 where the controller periodically monitors the output of the temperature detector "during a period that the apparatus is performing the recording operation").

Regarding claim 8, Shumura discloses the method according to claim 6, wherein setting of the rotational speed of the optical disc is performed prior to executing the recording operation on the optical disc (see column6 lines 43-64 where the

recording starts, the disc begins to rotate, and then information is recorded when laser beams irradiate the surface of the disc).

Regarding claim 9, Shumura discloses the method according to claim 6, wherein setting of the rotational speed of the optical disc is performed after executing the recording operation on the optical disc (see column 7 lines 20-26 where the recording operation is stopped, the rotation speed equals zero, when the temperature exceeds a range and after recording was already performed).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shumura et al. (US Patent Number 6,738,330 B2) in view of Kondo (US Patent Number 5,561,644).

Regarding claim 2, Shumura teaches the optical disc device according to claim 1, as noted in the 35 U.S.C. 102(e) rejection above. Shumura further teaches wherein the system controller determines the data recording properties of the optical disc (see the discussion of how the controller determines data recording properties or "writing conditions" such as recording time and address etc., in column 9 lines 15-18) but fails to teach that the data recording properties are based on information recorded in an inner

circumferential section of the optical disc. Kondo, on the other hand, teaches a an optical disc apparatus wherein the system controller determines the data recording properties of the optical disc based on information recorded in an inner circumferential section of the optical disc (see column 6 lines 64 and 65 and column 2 lines 59-62 where the system controller determines the type of disk).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system controller in the optical disc device of Shumura to include the ability to determine the data recording properties of the optical disc based on the TOC as taught by Kondo. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to quickly and easily determine data recording properties by accessing the inner portion of the disc.

Regarding claim 5, Shumura teaches the optical disc device according to claim 1, as noted in the 35 U.S.C. 102(e) rejection above. Shumura further teaches an optical disc with data recording properties, however the data recording properties do not include either the type of the optical disc, information regarding the manufacturer of the optical disc, information regarding the laser power needed for recording, and information regarding the rotational speed of the optical disc. Kondo, on the other hand, teaches an optical disc with data recording properties which include the type of the optical disc (see column 6 lines 64 and 65 and column 2 lines 59-62 where the system controller determines the type of disk).

Claims 7 and 10 are drawn to the method of using the corresponding apparatus claimed in claims 2 and 5 respectively. Therefore method claims 7 and 10 correspond to apparatus claims 2 and 5 and are rejected for the same reason of obviousness as used above.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumura et al. (US Patent Number 6,738,330 B2) in view of Sugita et al. (US Patent Number 5,311,494).

Regarding claim 4, Shumura discloses the optical disc device according to claim 1, as noted in the 35 U.S.C. 102(e) rejection above but fails to disclose the dimensions of the optical disc device. Sugita, however, teaches an optical disk apparatus wherein the dimension of the optical disc device in the thickness direction thereof is no more than 10 mm (see column 21 line 68 and column 22 lines 1 and 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical disc device of Shumura to have a thickness in accordance with the optical disk apparatus of Sugita. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings so that "the optical disc apparatus can be used in lap-top type or notebook-type personal computers and workstations" (Sugita column 22 lines 3-5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571) 270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LaTanya Bibbins

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER